

July 22, 2005

Paul Dabbs, Chief  
Statewide Planning Branch  
California Department of Water Resources  
PO Box 942836  
Sacramento, CA 94236-0001

Subject: Comments on Public Review Draft California Water Plan Update 2005

Dear Mr. Dabbs,

Thank you for the opportunity to provide comments on the "Public Review Draft of the California Water Plan Update 2005" (Update 2005) prepared by the California Department of Water Resources (DWR). The Santa Clara Valley Water District (District) has participated in the development of the plan, provided comments, and attended meetings and workshops. In addition, we have also worked with other agencies including the Association of California Water Agencies (ACWA) and the California Urban Water Agencies (CUWA) in reviewing the plan.

The District understands that the California Water Plan seeks to be "a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future." This document is expected to "guide the orderly and coordinated control, protection, conservation, development, management and efficient use of the water resources of the entire state. We also understand that past Water Plan Updates have guided the Legislature's and State Administration's decisions in providing financial and staff support for water related projects. Given this understanding we offer the following comments for your consideration:

#### **New Emphasis – Integrated Regional Water Management**

1. The District strongly endorses DWR's new emphasis of identifying regional water issues and promoting integrated regional water management. The District is responsible for stream stewardship, water supply, and flood protection for the 1.8 million residents of Santa Clara County. We are working with Bay Area water agencies to promote regional partnerships that will increase the region's water security and reliability. We look forward to future partnerships with DWR in developing a dynamic integrated regional water management planning process in the San Francisco Bay region. Update 2005 must clearly commit the state to actively facilitating regional and local projects to enhance water reliability statewide. This will alleviate pressures on backbone facilities and justify state financial and political support. Beneficiaries of regional projects may not be confined to a specific region and the indirect benefits to others may be substantial. This regional focus must be coupled with state funded improvement and maintenance of California's water resources backbone facilities.

#### **Improvement and Maintenance of California's Aging Water Resources Infrastructure**

2. Although we are pleased to see recognition of the need to maintain California's aging infrastructure, we are concerned that Update 2005 does not contain a strong enough commitment to rebuilding and enhancing the state's backbone water system infrastructure. We specifically request that DWR embrace the recommendations from ACWA's 2005 Blueprint for California Water. Existing facilities are stretched to provide for more and competing benefits that were not conceived of when those facilities were originally designed (e.g. San Luis Reservoir). Update 2005 should clearly call for state development of new surface and groundwater storage to improve backbone of the state's water system. Storage should complement conservation and reuse as it is needed to carry over saved water during extended drought periods. In Volume 2, Chapter 17 (Surface Storage) and in CALFED's

April 2005 Surface Storage progress report, storage is viewed as part of an overall water management strategy and is recognized as providing multiple benefits including water supply for all water users and the Environmental Water Account, releases for improving delta water quality, and drinking water quality, and providing cold water pool and spring releases to aid fisheries. Narrowly looking at just water supply benefits paints a false picture.

### **Bulletin 160 and the State's Water Supply Situation**

3. We are concerned that the traditional function of Bulletin 160 to identify the state's future water needs is not clearly met in Update 2005. We recognize that DWR and its Public Advisory Committee determined that detailed water supply and use data are lacking. Therefore, it is difficult to perform a comprehensive quantitative analysis to estimate water needs under various scenarios. Outdated numbers from Bulletin 160-98 on future water shortages continue to be used. This hampers the usefulness of Update 2005. We are particularly concerned that Update 2005 fails to characterize the magnitude of the State's dire water supply and reliability situation during the next and subsequent multi-year droughts

### **Balancing Water Conservation and Reuse and New Water Supply Investments**

4. On hot sunny days and during droughts, the need for increased water conservation and water reuse in all sectors seems obvious. However, when considering the many water resource management strategies to address future growth, it is inappropriate to force an "either/or" choice between aggressive water conservation and reuse and investment in new or re-developed water supply projects. It is clear that new water supplies, infrastructure improvements, and local water conservation and reuse efforts must be implemented together to ensure a secure water future for a growing and dynamic California. Update 2005 needs to be revised to clearly reject the premise that water conservation and reuse alone will meet California's future needs. There are 25 water management strategies (tools) showcased, in Update 2005. The tools are discussed independent of each other. It is critical to understand how all the management tools work together to provide water supply reliability for a region. An effective "strategy" would address – even in a general sense – the importance of all tools working together toward a common goal (e.g. a targeted level of water supply reliability). Then recognizing that no "tool" is perfect, local and regional efforts should utilize the most appropriate portfolio of tools to best secure their water future.

The next water plan should discuss the interrelationships of these strategies so that it can be of maximum use to the regions. The final version of the Update 2005 should include a new section discussing in detail the importance of evaluating how the management tools work together to provide water supply reliability. The real-time operational experiences of urban utilities, coupled with their long-term water supply and capital improvement plans is a dose of reality compared to a generalized discussion of individual water resource management strategies.

The District has evaluated similar strategies or as we call them "building blocks" in our Integrated Water Resources Planning Study 2003 (IWRP). It has been our experience that knowing the character of a building block is crucial in order to know which combinations of building blocks best fit into a cost-effective portfolio. As each building block can provide water supply benefits, each also has shortcomings and the true value becomes apparent when they work together in water supply portfolios.

To further illustrate this point, the figure on page 15 of the Plan Highlights inappropriately compares the various management strategies. The comparison is based on the additional annual supply provided by each alternative, which misleads the reader into gauging the value of each alternative by the quantity of new supplies it provides. In reality, the benefits of each alternative are more complex. The benefits of CALFED surface storage, for instance, are in reality a combination of increasing the State and Federal water projects' operational flexibility to regulate flows for the benefit of fish as well as water quality and supply reliability, and countering the impacts of climate change. Increasing water supply above existing levels is also a component of the benefits of surface storage, but it is one of a suite of benefits and should not be singled out as the primary benefit. Although the authors of

the Plan may not intend the value of the strategies to be gauged primarily on the additional supply produced, the figure on page 15 would likely have that effect, given that it is the only figure comparing the various management strategies in the Highlights. In addition, calling out the parameter of additional water supply from the suite of benefits the Plan tries to achieve (improved water quality, reduced demand, increased operational efficiency, etc.) seems to suggest it is more important than the other benefits, which is not the message of the Plan.

### **Emerging Threats – Climate Change and Water Quality Issues**

5. Update 2005 begins to face the reality of climate change as well as addressing other significant threats to our water future. State leadership must clearly emphasize that proactive state responses are needed to address the consequences of climate change and other emerging issues. The overall message concerning the magnitude of the threat that climate change poses to California's water future is not clearly stated. We recommend that this be emphasized much more strongly and that climate models be used to project future water supply scenarios. Evaluation of water management tools and how well they work together in addressing future water supply scenarios is needed. We also know that the reality of sea-level rise hit's the Delta hardest.

### **The Hard Realities Facing the Delta**

6. Update 2005 does not focus enough specific attention to the hard realities facing the Sacramento-San Joaquin Delta. Specifically,
  - a. There is not enough emphasis on the reality that the Delta is the essential, yet highly vulnerable crux of the state's backbone water system;
  - b. There is not enough recognition that the Delta's physical processes (oxidizing soils, decreasing levee stability, significant earthquake threat, and rising level), and its ecological processes (fish population indicators, invasive species impacts) demand a focused, immediate, and unprecedented response.
  - c. Given the potential impacts of climate change and risk of levee failure on the Delta, the importance of local storage as a key tool becomes even more important.

### **Specific Comments**

7. Update 2005 Highlights
  - a. It is important that the Highlights objectively reflect the message of the main Plan document and its supporting volumes, as the Highlights will be the document most widely reviewed. As it is, the Highlights heavily emphasize some alternatives, especially conservation and recycling, over others that may be equally important, while the main body of the Plan provides a somewhat more balanced overview.
  - b. In addition to levees, water use efficiency, and integrated regional planning, the Highlights should also emphasize the need to maintain (or, even better, increase) supply reliability through CALFED actions (specifically, the Delta Improvements Package, storage evaluations, and solving the San Luis Reservoir Low Point problem). In addition, a lot of the plan's success hinges on increasing operational flexibility.
8. Volume 1, Strategic Plan
  - a. Ch2, Pg 2-3. The foundational action "Use Water Efficiently" includes the re-operation of facilities, water transfers, and the reduction of groundwater overdraft. Rolling up these water supply management strategies is a definite departure from how most agencies would define "using water efficiently" (i.e., demand side management). Since this is a foundational action to ensuring a reliable water supply, we believe that this action's title and description should be

changed to reflect what it actually represents such as “maximize existing supplies” or “manage water efficiently.” In addition all three of the foundational actions can be greatly improved through the development of additional storage and improved conveyance capacity. Right now, the system is constrained by limited storage and capacity; thereby making it difficult to re-operate the system or enable transfers.

- b. Ch2, pg 2-3: The “Foundational Actions” listed are not comprehensive enough to support Initiative 2 (“Maintain and improve statewide water management systems”). Two additional points should be included as “Foundational Actions” to support other actions noted as important in the plan, including additional storage and improved conveyance capacity: (1) Ensure supply reliability; and (2) Increase operational flexibility.
- c. Ch2, pg 2-3: The second initiative for reliability is to “Improve Statewide Water Management Systems.” This includes some discussion on maintaining aging facilities and implementing the CALFED program. Throughout the report, there is significant discussion of the importance of the Delta for ecological and flood control reasons. What seems to be missing is discussion on how critical the Delta is to the water supply of 2/3 of Californians, and that is the essential piece of the state’s water system. There needs to be a stronger message on the need to address Delta issues now to protect California’s water supply.
- d. CH, Pg 2-9: The discussion under “Implement the CALFED Program” is brief. The importance of storage and conveyance are not mentioned, and these are large parts of the CALFED program.

#### 9. Volume 2, Resource Management Strategies

- a. Table 1-1, Page 1-4 - Strategy summary table: This table needs a check mark (dot) that links regional/local surface storage to recreational opportunities.
- b. Figure 1-1, Page 1-5: Water supply benefits chart: Why isn’t regional/local storage included? Surface Storage CALFED is included. The intent of this chart to convey these eight options is unclear when regional/local storage is needed as well. Further, regarding potential costs of urban WUE – does cost include end-users’ cost? E.g. cost of washing machines not covered by rebates, landscape conversion costs, etc.
- c. Chapter 15, Page 15-1: Recharge Areas in California, first paragraph: SCVWD established recharge areas in the 1930s.
- d. Chapter 17: Regarding storage vs. water use efficiency, as stated in Chapter 17, surface storage, and in CALFED’s April 2005 Surface Storage progress report, storage is part of an overall water management strategy. Storage provides multiple benefits including water supply for water users and EWA releases for improving delta water quality and drinking water quality. It further provides cold water pool and spring releases to aid fisheries. Just looking at water supply benefits and comparing those to water conservation (the only benefit it can provide) is too narrow.

#### 10. Volume 3, Regional Reports

It is our observation that the Regional Reports do not adequately convey the regions’ strengths, weaknesses, and challenges thus the profiles may be interpreted incorrectly. The information presented for the San Francisco Bay Hydrologic Region is inadequate in terms of representing existing supplies and the challenges Bay Area agencies face. For example, there is no discussion of the critical role groundwater plays as a local supply for SCVWD, Zone 7, and ACWD. These agencies have all implemented active conjunctive use and groundwater protection programs. Specific comments/suggestions are given below.

- a. Ch 3 – California Water Today; San Francisco Bay Hydrologic Region, page 3-13: What about other innovative efforts to improve reliability? We recommend adding the following: “To

*improve water supply reliability, Bay Area water agencies continue to manage a diverse portfolio of water supplies and to explore innovative approaches to ensure the quality and reliability of the region's supplies. These innovative strategies include programs in recycled water, desalination, groundwater banking, conjunctive use, and water transfers."*

- b. Ch 3, Page 3-1: For Topography, Hydrology and Climate, last sentence, change to: "Although there are several small reservoirs throughout this region, *several local agencies rely in part on groundwater*. The primary water supplies are imported from other regions of the State".
- c. Groundwater, Page 3-2: The first sentence gives the impression that groundwater is insignificant in terms of Bay Area supplies. We recommend adding this sentence to follow: *"However, for agencies like SCVWD, ACWD, and Zone 7, groundwater is a critically important locally-controlled supply that helps reduce dependence on imported supplies."*

Change last sentence to: *"SCVWD, ACWD, and Zone 7 have implemented active conjunctive use programs to optimize the use of groundwater and surface water resources. These agencies have also developed proactive programs to monitor and protect groundwater quality. Other Bay Area agencies are conducting studies to investigate and develop conjunctive use programs."*

- d. Population and Water Use, Page 3-2: Second paragraph reference to SCVWD is somewhat misleading – 383 TAF is total water use for service area (which includes Llagas, part of Central Coast Hydrologic Region). Most of the agricultural use cited (29 TAF) is outside SF Region. (Ag use in SF Region is less than 1% of total use)
- e. Water Supplies, Page 3-2: Table 3-1 – Why does this show San Benito CVP water when San Benito not in SF Region? Also, the District's data shows 91 TAF for District, while this shows 89 TAF for both SC and San Benito.
- f. Recycled Water, Page 3-3: We should highlight what local agencies are already doing to promote recycled water use by adding the following: *"Currently, nearly 50 million gallons per day of recycled water is produced in the Bay Area. Future planned projects will increase this number to over 100 mgd by 2020."* Source: BAWAC Water Management Brochure
- g. Acronym Box Page 3-3: SCWA – Is this correct? Or should this be Sonoma County Water Agency or Solano? Acronym for SLLPIP is incorrect.
- h. State of the Region, First sentence, Page 3-4: list of water related challenges should include improving infrastructure reliability.
- i. Water Supply Reliability Page 3-5: shows an estimated shortfall of over 250 TAF from our 2001 UWMP, which gives the impression our supplies are not reliable in a single dry year. We should use the IWRP value for available supply in a very dry year (159 TAF). However, as this does not include any carryover storage from surface reservoirs or groundwater, this should be increased by 200 TAF (available from in-county groundwater reserves or from out-of-county banked supplies). Change to read: *"Under 2020 demands, SCVWD estimates a shortfall of approximately 66,000 AF in a very dry year (repeat of 1977 drought conditions), or approximately 15% of projected demand."*
- j. Groundwater, Page 3-6: Please reflect the importance of groundwater in the region by strengthening the message as follows:
  - l. Add new first bullet: *"ACWD, SCVWD, and Zone 7 have implemented active conjunctive use programs within their service areas to optimize the use of groundwater and surface water, protect groundwater from overdraft and subsidence, prevent saltwater intrusion, and provide emergency storage."*

- II. Add new second bullet: *“Bay Area agencies with groundwater supplies actively monitor water quality and have implemented various groundwater protection measures to ensure the quality of local supplies are not degraded.”*
- III. Change third bullet to *“ACWD, SCVWD, Zone 7, and Solano County Water Agency currently bank 425,000 acre-feet in off-site groundwater storage programs and other Bay Area water agencies are investigating banking options for the future.”* Source: BAWAC brochure
- IV. Fourth bullet: *“Other Bay Area agencies are exploring the future possibilities of conjunctive use.”*
- k. Water Conservation and Recycling, Page 3-6: Note that information for the Bay Area Regional Water Recycling Program’s (BARWRP) Water Recycling Project Master Plan, appears to be dated. Recommend adding to last paragraph: *“Bay Area water agencies are actively involved in implementing water conservation programs and raising public awareness about the need to conserve water supplies through more efficient practices. These aggressive conservation efforts help to reduce water demands and conserve the Bay Area’s valuable drinking water supplies.”*
- l. Drinking Water Quality, Page 3-8: Here, and in other portions of this section, there is an unbalanced approach to presenting info on what local agencies are doing.
  - I. The second paragraph is almost entirely focused on CCWD, with one general sentence to describe the efforts of SCVWD, ACWD, and Zone 7. Please add – *“Since 2002, the SCVWD has been in the middle of major renovations at each of its three water treatment plants. The renovations will allow the SCVWD to provide an even higher quality drinking water to residents of Santa Clara County. When the projects are completed, around 2010, instead of relying on chlorination to disinfect the water, there will be a switch to ozone which has no unpleasant taste, while being a more effective disinfectant .”*
  - II. The last paragraph regarding groundwater quality should be revised to show that SCVWD actively protects groundwater. Please add - *“SCVWD proactively protects the quality of groundwater underlying the Santa Clara Valley from numerous threats. Aggressively responding to pollutants such as MTBE, PCE, TCE, and perchlorate, SCVWD groundwater quality programs identify and evaluate threats to groundwater quality and prevent or mitigate contamination.”*
  - III. Change last sentence to: *“Recharge projects and the use of imported water have effectively halted land subsidence and successfully stopped or reversed seawater intrusion into aquifers around the Bay.”*
- m. Wetlands and Watershed Management, Page 3-9 This section appears unbalanced with a large amount of discussion compared to other sections. Also, the box on 3-11 describing regional forums addressing water policy issues (such as BAWAC) seems out of place here.
- n. Looking to the Future, Water Quality, Page 3-13 – This only discusses Bay water quality and contaminant loading. What about drinking water quality, source water protection, emerging contaminants, and efforts to keep pace with changing water quality standards? Please add the following: *“Bay Area water agencies have made significant investments in programs and projects to actively protect source water quality including facility upgrades, advanced treatment, watershed monitoring, groundwater monitoring and protection, source water assessments, demineralization, and non-point source programs.”*
- o. Ch 3, Page 3-18:3-19: Table 3-1, 3-2, and SF Bay Hydrologic Region Flow Diagrams – A flow model is vaguely referenced, but it is not clear where these values come from. However, the flow diagrams show groundwater extraction of 37.6, 139.3, and 219 TAF for the entire region.

Also, there is no groundwater recharge shown. Flow diagrams currently indicate a decline in groundwater storage within the established reservoir portion of the groundwater basin. Note: SCVWD service area average annual pumping for the last 10 years has been between 150 and 160 TAF. SCVWD's annual recharge capacity is about 140 TAF.

- p. Ch 3, Page 3-15: For Figure 3-1: San Francisco Bay Hydrologic Region – Why does this map not show outflow?
- q. Ch 3, Page 3-15: Per Figure 3-4: San Francisco Bay Hydrologic Region Dedicated Water Supplies For Water Years 1998, 2000, 2001 – Why is the Colorado Project water cited in a graph for the San Francisco Bay Hydrologic Region?
- r. Ch 4, Water Supply and Use, Second paragraph, Page 4-5: The Central Coast Hydrologic Region also includes a portion of the Santa Clara Valley Water District service area (Llagas Subbasin).
- s. Ch 4, State of the Region, Challenges (4-7) Add: *“In the southern portion of Santa Clara County, elevated concentrations of nitrate and perchlorate have been detected. SCVWD continues to implement a Nitrate Management Program to monitor nitrate occurrence, reduce nitrate exposure, and reduce nitrate loading throughout Santa Clara County. SCVWD also provides free in-field technical assistance on nutrient and irrigation management to growers. In late 2002, perchlorate, a chemical used in the manufacturing of rocket fuel, road flares, and fireworks, emerged as a significant contaminant in southern Santa Clara County. The known extent of the plume extends 10 miles and more than 800 water supply wells have been affected. SCVWD is working closely with the Regional Board, local agencies, and affected communities to secure a comprehensive long-term corrective action plan.”*
- t. Ch 4, Looking to the Future, Ongoing Planning Efforts Box, Page 4-9: Include Santa Clara Valley Water District Groundwater Management Plan.
- u. Ch 4, Page 4-2: Conjunctive Management in California, second paragraph -- revise first sentence to: “... 70 recharge ponds with an average annual recharge capacity of 138,000 acre-feet.”

We appreciate all the hard work of DWR staff, its consultants, and stakeholders during the Update 2005 drafting process. We look forward continuing to work cooperatively with you on future California Water Plan and in ensuring a bright and sustainable future for California water. If you have any questions regarding these comments, please do not hesitate to call me at 408-265-2607, extension 3751.

Sincerely,

[Original signed by]

James S. Crowley  
Water Supply Sustainability Planning Unit Manager